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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,698	03/30/2004	David P. Craig	2003-IP-011572	5836
71407	7590	04/29/2009		
ROBERT A. KENT P.O. BOX 1431 DUNCAN, OK 73536			EXAMINER HENSON, MISCHITA L	
			ART UNIT 2857	PAPER NUMBER
			NOTIFICATION DATE 04/29/2009	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/813,698	<b>Applicant(s)</b> CRAIG, DAVID P.	
	<b>Examiner</b> Mi'schita' Henson	<b>Art Unit</b> 2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-9,15,16 and 28 is/are rejected.
- 7) ☐ Claim(s) 2,10-14,17-27,29 and 30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>March 30, 2004, July 12, 2005</u> .                           | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Specification***

1. The abstract of the disclosure is objected to because of undue length. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory

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double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1, 3-4, 7-9, 15-16 and 28 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 12, 20-21, 65-66 and 76-77 of U.S. Patent No. 7,054,751. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1 and 3-4 are generic to the method recited in claims 1-3 of US Patent No. 7,054,751, claims 1 and 9 are generic to the method recited in claim 1 of US Patent No. 7,054,751, claims 1, 3 and 7 are generic to the method recited in claims 12 and 20-21 of US Patent No. 7,054,751, claims 1, 3 and 8 are generic to the method recited in claims 12 and 20-21 of US Patent No. 7,054,751, claims 15-16 are generic to the method recited in claims 65-66 of US Patent No. 7,054,751 and claim 28 is generic to the method recited in claims 76-77 of US Patent No. 7,054,751, thus claims 1, 3-4, 7-9, 15-16 and 28 are anticipated by claims 1-3, 12, 20-21, 65-66 and 76-77 of U.S. Patent No. 7,054,751.

3. Claims 1 and 3-6 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-7 of U.S. Patent No. 7,272,973. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1 and 3-6 are generic to the method recited in claims 1-7 of US Patent No. 7,272,973, thus claims 1 and 3-6 are anticipated by claims 1-7 of U.S. Patent No. 7,272,973.

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4. Claims 1 and 3-6 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-7 of U.S. Patent No. 7,389,185. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1 and 3-6 are generic to the method recited in claims 1-7 of US Patent No. 7,389,185, thus claims 1 and 3-6 are anticipated by claims 1-7 of U.S. Patent No. 7,389,185.

***Allowable Subject Matter***

5. Claims 2, 10-14, 17-27 and 29-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Carlton et al. in US Patent 3,285,064 teaches "a method for testing vertically separated producing zones to determine whether they are interconnected. The method is also useful for determining fracture orientation. It has been known for many years that the gross properties of a reservoir can be determined by so-called "interference testing." In the interference test, constant rate production or injection is initiated at one well, and the effect of this flow is measured as pressure versus time at another well. Useful interpretation of the interference test requires that the constant rate production or injection at the input well be continued for a prolonged period of time, while the record of pressure change at one or more observation wells is continued for the same period of

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time. The test is complete whenever it can be determined that the record of pressure change at the observation well has assumed a truly logarithmic decline or buildup. A successful interference test not only requires a prolonged control of the input well, and a prolonged observation period, but also requires that flow rates at other wells of the reservoir be stabilized prior to the test and kept substantially quiescent for the entire duration of the test, or the changes carefully recorded and entered into the calculations—a task that makes computation highly complex and subject to error” (column 2 lines 5-35).

Gringarten in US Patent 4,328,705 teaches “A graphical plot of pressure versus time during pressure build-up in a temporarily closed well is matched to a type-curve on a graph of such curves to determine if the well is fractured, acidified, fissured or damaged” (Abstract) and “Before putting a well into production, a common practice is to make some measurements in order to determine the characteristics of the producing zone. This preliminary step before production is very important since it helps to define the most suitable conditions for producing the reservoir fluid, and to determine an appropriate treatment to the well for improving its production capacity. One of these measurements is the survey of pressure variations of the fluid in the wellbore versus time. By closing the well, the "build-up" of pressure is obtained by recording the pressure variations beneath the closure location of the well. Conversely, by opening the well, the "drawdown" of pressure can be recorded...To shut in or open the wellbore, a valve is installed in the tubing, preferably in the proximity of the producing zone but

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above the pressure gauge, to be able to record the "build-up". Valves suitable for that purpose are well known in the oil industry" (column 2 line 62 - column 3 line 30).

Petak et al. in US Patent 4,797,821 teaches "Determining pressure characteristics of fluid flow from a wellbore provides a method to obtain physical characteristics of a subterranean reservoir. An analytical solution of flow a flow model for an underground dual porosity reservoir is obtained for the transient flow regime of an unsteady flow exhibiting wellbore storage and skin effects. Using either the continuous solution or a set of type curves obtained from that continuous solution, a match is obtained with an experimental data set. The first time derivative of the dimensionless pressure solution to the flow model can also be used to more easily identify the dimensionless time at which the transient period ends. Using classical relationships between known values and information obtained from the type curves, the effective permeability, dimensionless fracture transfer coefficient, the skin factor, the dimensionless wellbore storage coefficient, and the dimensionless storativity ratio can be ascertained for the underground formation" (Abstract).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mi'schita' Henson whose telephone number is (571) 270-3944. The examiner can normally be reached on Monday - Thursday 7:30 a.m. - 4:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on (571) 272-7925. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

04/21/09  
/Mi'schita' Henson/  
Examiner, Art Unit 2857

/Eliseo Ramos-Feliciano/  
Supervisory Patent Examiner, Art Unit 2857